

94 RF-02213

**EG&G ROCKY FLATS**



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| DIST.                  | LTR | ENC |
|------------------------|-----|-----|
| BENJAMIN, A.           |     |     |
| BERMAN, H.S.           |     |     |
| BRANCH, D.B.           |     |     |
| CARNIVAL, G.J.         |     |     |
| COPP, R.D.             |     |     |
| DAVIS, J.G.            |     |     |
| FERRERA, D.W.          |     |     |
| HANNI, B.J.            |     |     |
| HARMAN, L.K.           |     |     |
| HEALY, T.J.            |     |     |
| HEDAHL, T.             |     |     |
| HILBIG, J.G.           |     |     |
| KIRBY, W.A.            |     |     |
| KUESTER, A.W.          |     |     |
| LEE, E.M.              |     |     |
| MANN, H.P.             |     |     |
| MARX, G.E.             |     |     |
| MCDONALD, M.M.         |     |     |
| McKENNA, F.G.          |     |     |
| MONTROSE, J.K.         |     |     |
| MORGAN, R.V.           |     |     |
| POTTER, G.L.           |     |     |
| PIZZUTO, V.M.          |     |     |
| RILEY, J.H.            |     |     |
| SANDLIN, N.B.          |     |     |
| SHEPLER, R.L.          |     |     |
| STIGER, S. G.          | X   | X   |
| STEWART, D.L.          |     |     |
| SULLIVAN, M.T.         |     |     |
| SWANSON, E.R.          |     |     |
| WILKINSON, R.B.        |     |     |
| WILLIAMS, S. (ORC)     |     |     |
| WILSON, J.M.           |     |     |
| ZANE, J.O.             |     |     |
| PRIMROSE               | X   | X   |
| BUSBY                  | X   | X   |
| ROBERTS, R.            | X   | X   |
| PETERMAN               | X   | X   |
| HOX                    | X   | X   |
| LARIN                  | X   | X   |
| BUDDY                  | X   | X   |
| OGG                    | X   | X   |
| MAST                   | X   | X   |
| ORourke                | X   | X   |
| ERM Action Tracking    |     |     |
| File (2)               | X   | X   |
| Lake                   | X   | X   |
| RPM Action Tracking    |     |     |
| ERM Records Center (2) | X   | X   |
| Correspondence Control | X   | X   |

CLASSIFICATION:

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| UNCLASSIFIED | X | X |
| CONFIDENTIAL |   |   |
| SECRET       |   |   |

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IN REPLY TO RFP CC NO:

ACTION ITEM STATUS  
☐ OPEN ☐ CLOSED

☐ PARTIAL

LTR APPROVALS:  
ALP:wsb  
ORIG & TYPIST INITIALS  
ALP:jlm

RF-46469 (Rev. 9/92)

EG&G ROCKY FLATS, INC.

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February 21, 1994

94-RF-02213

Richard J. Schassburger  
Environmental Restoration Division  
DOE, RFO

**SCHEDULE EXTENSION ASSUMPTIONS AS A RESULT OF THE STOP WORK ORDER FOR RISK ASSESSMENTS – WSB-025-94**

Ref: W. S. Busby ltr (93-RF-296E) to R. J. Schassburger, Schedule Extension Assumptions Resulting from the Baseline Risk Assessment Work Stoppage, November 16, 1993

Operable Units (OUs) 1 through 7 were affected by the stop work order issued for the Human Health Risk Assessment (HHRA) issues. The stop work order has been lifted for OU 1 and an extension request has been submitted. Per the above referenced letter, OUs 2 through 7 will require schedule extensions following resolution of the HHRA issues and lifting of the stop work order. Rough estimates of the schedule impacts for the individual OUs are attached. These schedule impacts will be refined as more information is obtained.

From the information obtained during the current negotiations, it appears that more than a day-to-day schedule extension will be required for most of the impacted OUs. This is based on the following:

- Critical Path Schedule** – Since non-HHRA work for each OU has continued, the risk assessment tasks will be on the critical path when the stop work order is lifted. There will be little opportunity to recover schedule. Therefore, even if scope was not changed, a day-for-day schedule extension would be necessary.
- HHRA Scope Increases** – The preliminary HHRA discussions have indicated that the scope of the HHRA will increase substantially. This will result in the need for schedule extensions greater than a day-for-day extension from the original stop work date.
- Planning Requirements** – Schedule estimates will be revised to include time to plan, implement, and perform the additional scope.
- Work Packages** – All impacted OUs must change the current scope and the schedule baseline plus acquire additional funding if required through the Plant Change Control Board. If additional funds are available, this process has normally required approximately one month to accomplish.

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5. **Contracts** – The current contracts must be modified in order to change and increase the negotiated scope. Depending on the dollar amount of the scope change, a minimum of 30 working days is needed for modifying the subcontracts.
6. **Changes To Prior Work** – If resolution of the data aggregation issue results in a significant change to the existing relationship between the risk assessment and the nature and extent of contamination task, significant schedule adjustment will be required.
7. **Work Plan Modifications** – If the changes in the HHRA result in the need to collect additional data, or in the need to revise previously completed work plans, additional time will be required. Schedule extensions for OUs requiring new work plans will include sufficient time to plan, write, obtain Department of Energy, Environmental Protection Agency and Colorado Department of Health approvals, implement, and perform the additional work.

Schedule extensions for OUs requiring changes to existing work plans will include time to modify work plans, obtain additional approvals, and modify existing work or collect additional data. Changes in the existing OU Work Plans or requirements for additional work plans will also require time to identify and acquire funding, and to modify subcontracts in conjunction with the scope increases discussed in item 2.

If additional information is needed or if there are questions concerning this information, please call Rick Roberts at extension 8508 or Annette Primrose at extension 8618.



Wanda S. Busby  
Director  
Remediation Project Management  
EG&G Rocky Flats, Inc.

ALP:jlm

Orig. and 1 cc – R. J. Schassburger

Attachment:  
As Stated

## **OPERABLE UNIT 1**

### **Status**

Finalizing the Phase III Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation Report (RFI/RI) and proceeding with the Feasibility Study (FS). The stop work order for Operable Unit (OU) 1 was lifted on November 5, 1993.

### **Schedule Impact**

A schedule slip of 135 days was incurred for the Phase III RFI/RI Report. The Report was being prepared and was nearly ready to be issued at the time of the stop work order. While work proceeded on the FS and the Interim Measures/Interim Remedial Action (IM/IRA), the schedule slippage could not be recovered for the Phase III RFI/RI Report.

### **Potential Problems**

While OU 1 was given permission to proceed with the Human Health Risk Assessment (HHRA) using a negotiated methodology, the Phase III RFI/RI Report has not yet been accepted. If problems arise with obtaining acceptance of the Report, significant cost and schedule impacts would occur.

## OPERABLE UNIT 2

### Status

Background comparison and contaminants of concern (COCs) have been completed. The remaining non-HHRA work is mostly completed. Operable Unit (OU) 2 is currently under the stop work order.

### Assumptions

18 sources and 18 hot spots have been identified that require risk assessments.

Assume that the COC technical memorandum (TM) will need to be reissued, but the methodology will not change.

Additional transport modeling will need to be done for the sources and hot spots. However, the modeling TM and the current models will not need to be revised.

The toxicity assessment technical memorandum will need to be re-done.

A data aggregation technical memorandum will need to be prepared.

### Cost Impact

The estimated costs are:

|                              |               |
|------------------------------|---------------|
| 36 risk assessments          | \$720,000     |
| Redo COC TM                  | 80,000        |
| Redo Toxicity Assessment     | 20,000        |
| Generate Data Aggregation TM | 80,000        |
| Subcontract Proposal cost    | <u>36,000</u> |
| TOTAL                        | \$936,000     |

### Schedule Impact

The estimated schedule impacts are (working days):

|   |                 |
|---|-----------------|
| Estimated time that stop work order is in effect  | 200 days        |
| Plant change control board for work packages      | 21 days         |
| Modify contracts to add additional scope          | 39 days         |
| Finalize COC, Toxicity and Exposure Scenario TMs, |                 |
| Develop Data Aggregation TM                       | 92 days         |
| Perform additional modeling                       | 42 days         |
| Perform 36 risk assessments                       | <u>103 days</u> |
| ESTIMATED TOTAL                                   | 497 days        |

## OPERABLE UNIT 3

### Status

Background comparison and COC selection are currently being performed. OU 3 is currently under the stop work order for data aggregation. However, the offsite areas consist of distinct and unrelated IHSSs. Data aggregation for this OU may not depend completely on resolution of the stop work order.

### Assumptions

Five sources have been identified that would require risk assessments.

Five hot spots will require assessment.

An OU-wide risk assessment will not be required due to the spatial separation of the IHSSs in the OU.

### Cost Impact

The estimated additional costs are:

|                              |                     |
|------------------------------|---------------------|
| 5 risk assessments           | \$100,000           |
| Generate Data Aggregation TM | 80,000              |
| Generate COC TM              | 80,000 <sup>a</sup> |
| Generate Toxicity Assessment | 20,000 <sup>b</sup> |
| Subcontract Proposal cost    | <u>7,200</u>        |
| TOTAL                        | \$287,200           |

### Schedule Impact

The schedule requirements consist of (working days):

|  |                |
|--|----------------|
| Estimated time that stop work order is in effect | 180 days       |
| Plant change control board for work packages     | 21 days        |
| Modify contracts to add additional scope         | 30 days        |
| Generate COC, Toxicity and Exposure Scenario TMs |                |
| Develop Data Aggregation TM                      | 92 days        |
| Perform modeling                                 | 42 days        |
| Perform 10 risk assessments                      | <u>50 days</u> |
| ESTIMATED TOTAL                                  | 415 days       |

<sup>a</sup> Partially scoped in the work package

<sup>b</sup> Currently scoped in work package

## **OPERABLE UNIT 4**

### **Status**

OU 4 is included under the stop work order. However, an agreement has been reached with DOE and the agencies that the HHRA and Environmental Evaluation (EE) will not be included in the Phase I RFI/RI Report. The HHRA and EE will be included in the Phase II RFI/RI Report due in 1996.

### **Assumptions**

The HHRA and EE will be completed for the Phase II RFI/RI Report due in 1996.

### **Cost Impact**

*There is no associated cost impact due to the stop work order.*

### **Schedule Impact**

There is no estimated schedule impact due to the stop work order.

## OPERABLE UNIT 5

### Status

OU 5 is currently under the stop work order. Background comparisons are being performed and preliminary COCs are being determined. Non-HHRA work is continuing. Additional field work has been identified and will need to be completed prior to the issuance of the RFI/RI report. This additional work will require additional schedule extensions but will result in a schedule acceleration for the Remedial Investigation/Feasibility Study process.

### Assumptions

18 sources and 18 hot spots are assumed that would require risk assessments.

The Exposure Scenario Technical Memorandum must be revised.

A data aggregation technical memorandum must be prepared.

### Cost Impact

The estimated costs are:

|                                 |                     |
|---------------------------------|---------------------|
| 36 risk assessments             | \$720,000           |
| Generate COC TM                 | 80,000 <sup>a</sup> |
| Generate Toxicity Assessment TM | 20,000 <sup>b</sup> |
| Generate Data Aggregation TM    | 80,000              |
| Subcontract Proposal cost       | <u>36,000</u>       |
| <br>TOTAL                       | <br>\$936,000       |

### Schedule Impact

The estimated schedule impacts are (working days):

|   |                 |
|---|-----------------|
| Estimated time that stop work order is in effect  | 160 days        |
| Plant change control board for work packages  | 21 days         |
| Modify contracts to add additional scope  | 30 days         |
| Generate COC and Toxicity TMs, revise Exposure Scenario TM, develop Data Aggregation TM | 92 days         |
| Perform modeling  | 42 days         |
| Perform 36 risk assessments   | <u>103 days</u> |
| <br>ESTIMATED TOTAL   | <br>448 days    |

<sup>a</sup> Partially scoped in the work package

<sup>b</sup> Currently scoped in the work package

## OPERABLE UNIT 6

### Status

Background comparisons are being performed and preliminary COCs are being determined. Non-HHRA work is continuing. OU 6 is currently under the stop work order. The need for additional field work has been identified but this field work should not impact the schedule.

### Assumptions

18 sources and 18 hot spots are assumed that would require risk assessments.

The Exposure Scenario Technical Memorandum will need to be revised.

A data aggregation technical memorandum will need to be prepared.

### Cost Impact

The estimated costs are:

|                                 |                     |
|---------------------------------|---------------------|
| 36 risk assessments             | \$720,000           |
| Generate COC TM                 | 80,000 <sup>a</sup> |
| Generate Toxicity Assessment TM | 20,000 <sup>b</sup> |
| Generate Data Aggregation TM    | 80,000              |
| Subcontract Proposal cost       | <u>36,000</u>       |
| <br>TOTAL                       | <br>\$936,000       |

### Schedule Impact

The estimated schedule impacts are (working days):

|   |                 |
|---|-----------------|
| Estimated time that stop work order is in effect  | 160 days        |
| Plant change control board for work packages  | 21 days         |
| Modify contracts to add additional scope  | 30 days         |
| Generate COC and Toxicity TMs, revise Exposure Scenario TM, develop Data Aggregation TM | 92 days         |
| Perform modeling  | 42 days         |
| Perform 36 risk assessments   | <u>103 days</u> |
| <br>ESTIMATED TOTAL   | <br>448 days    |

<sup>a</sup> Partially scoped in the work package

<sup>b</sup> Currently scoped in work package



## **OPERABLE UNIT 7**

### **Status**

Background comparisons are being performed and COCs are being determined. Non-HHRA work is continuing. Work currently conducted during the stop work order include negotiations to revise the scope of OU 7 and incorporate Colorado Hazardous Waste Act (CHWA) closure requirements and Environmental Protection Agency (EPA) guidance on presumptive remedies. A proposal to close OU 7 using the IM/IRA process is currently in progress. This strategy has been accepted in principal by the Department of Energy, EPA and the Colorado Department of Health and will result in major schedule and cost savings.

### **Assumptions**

The proposal to CHWA to close OU 7 will be accepted and a new schedule and cost estimate will be developed at that time.

Data quality objectives will be finalized in March, 1994.

The proposed scope for integration of Phase I and Phase II field activities will be accepted by the regulators by April 16, 1994.

The baseline for OU 7 will be modified and approved via Plant Change Control Board (PCCB) in March, 1994.

### **Cost Impact**

There is no associated cost impact due to the stop work order.

### **Schedule Impact**

A significant schedule variance from the current baseline occurred as a result of the stop work order. Estimated time that stop work order will be in effect is 200 days. This schedule variance will be eliminated during re-baselining in March 1994.